Fraunhofer IIS

Offers for a 3-Months Internship for Bachelor Students

Topic 1:
SafeTRIP Project:
Analysis of experimental data from Mobile Satellite Terminals

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Abstract:
Within the SafeTRIP project (www.safetrip.eu), a satellite based system platform is developed for Intelligent Transport Systems (ITS) applications.
Field trials are carried out in summer 2012 with several "On-Board-Units" (OBU) in France and Spain to obtain realistic experimental data for the reception of broadcasting content from the satellite and for bidirectional services, e.g. emergency messages. These experimental data will be available continuously during the trials and are used for two purposes:

- Data preprocessing is required to deliver input to the SafeTRIP measurement database
- Further statistical analysis like the Quality-of-service (QoS), which depends on the current type of environment (highway, urban etc.).

Tasks:
Analysis of the log files from the SafeTRIP terminals:

- Preparation of files for the database. The analysis will be based on existing matlab scripts, which have to be modified slightly.
- Analysis of the QoS for different environments by using the freely available classification of the Global Land Cover Facility (www.landcover.org/data/landcover). Scripts to access this classification in matlab are to be developed.

Requirements:

- Experience with MATLAB

Payment Conditions & Application:
Fraunhofer IIS will pay an appropriate allowance to cover living costs and will also provide for accommodation and medical insurance during your stay in Erlangen. Travel expenses will not be reimbursed.

If you are interested in the afore-mentioned topic please send your formal application including CV, a copy of your *valid* passport or ID card, motivation letter, latest grades report and the date of your earliest possible start to:

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About the Fraunhofer IIS department "Communications":
Research in the field of communication technologies is focused on innovative developments for satellite, terrestrial and combined (hybrid) broadcasting networks such as satellite-based direct-to-the-home broadcasting to fixed receivers or mobile satellite broadcasting systems as implemented in the USA (S-DARS).

The Communications Department specializes in system design, definition, analysis and validation. In addition we do research in waveform design, the implementation of hard- and software as well as real-time prototypes and in the development of first-class professional DRM test and measurement systems.

Furthermore, future research is required in the design of complementary terrestrial transmission systems, for instance the digitalization of FM broadcasting or the integration of existing terrestrial systems such as Digital Video Broadcasting Handheld DVB-H or Digital Multimedia Broadcasting DMB.

For further information please visit our website: www.iis.fraunhofer.de